## SEQUENCE LISTING

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<110> Kwon, Byoung S.
<120> MURINE 4-1BB GENE
<130> 740.009US1
<140> US 08/012,269
<141> 1993-02-01
<150> US 07/922,996
<151> 1992-07-30
<150> US 07/267,572
<151> 1988-11-07
<160> 13
<170> FastSEQ for Windows Version 4.0
<210> 1
<211> 2350
<212> DNA
<213> Mus musculus
<220>
<221> misc feature
<222> (1)...(2350)
\langle 223 \rangle n = A,T,C or G
<400> 1
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ctacaccagg aaaaggacac attcgacaac aggaaaggag cctgtcacag aaaaccacag
                                                                       120
tgtcctgtgc atgtgacatt tcgccatggg aaacaactgt tacaacgtgg tggtcattgt
                                                                       180
gctgctgcta gtgggctgtg agaaggtggg agccgtgcag aactcctgtg ataactgtca
                                                                       240
                                                                       300
qcctqqtact ttctqcaqaa aatacaatcc aqtctqcaaq aqctqccctc caagtacctt
                                                                       360
ctccagcata ggtggacagc cgaactgtaa catctgcaga gtgtgtgcag gctatttcag
                                                                       420
gttcaagaag ttttgctcct ctacccacaa cgcggagtgt gagtgcattg aaggattcca
                                                                       480
ttgcttgggg ccacagtgca ccagatgtga aaaggactgc aggcctggcc aggagctaac
gaagcagggt tgcaaaacct gtagcttggg aacatttaat gaccagaacg gtactggcgt
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ctgtcgaccc tggacgaact gctctctaga cggaaggtct gtgcttaaga ccgggaccac
                                                                       600
ggagaaggac gtggtgtgt gaccccctgt ggtgagcttc tctcccagta ccaccatttc
                                                                       660
                                                                       720
tgtgactcca gagggaggac caggagggca ctccttgcag gtccttacct tgttcctggc
gctgacateg gctttgctgc tggccctgat cttcattact ctcctgttct ctgtgctcaa
                                                                       780
                                                                       840
atggatcagg aaaaaattcc cccacatatt caagcaacca tttaagaaga ccactggagc
                                                                       900
agctcaagag gaagatgctt gtagctgccg atgtccacag gaagaagaag gaggaggagg
aggetatgag etgtgatgta etateetagg agatgtgtgg geegaaaceg agaagcaeta
                                                                       960
ggaccccacc atcctgtgga acagcacaag caaccccacc accctgttct tacacatcat
                                                                      1020
                                                                      1080
cctagatgat gtgtgggcgc gcacctcatc caagtctctt ctaacgctaa catatttgtc
tttacctttt ttaaatcttt ttttaaattt aaattttatg tgtgtgagtg ttttgcctgc
                                                                      1140
ctgtatgcac acgtgtgtgt gtgtgtgtgt gtgacactcc tgatgcctga ggaggtcaga
                                                                      1200
                                                                      1260
agagaaaggg ttggttccat aagaactgga gttatggatg gctgtgagcc ggnnngatag
gtcgggacgg agacctgtct tcttatttta acgtgactgt ataataaaaa aaaaatgata
                                                                      1320
                                                                      1380
tttcgggaat tgtagagatt ctcctgacac ccttctagtt aatgatctaa gaggaattgt
tgatacgtag tatactgtat atgtgtatgt atatgtatat gtatatataa gactctttta
                                                                      1440
                                                                      1500
ctqtcaaaqt caacctaqaq tqtctqqtta ccaggtcaat tttattggac attttacgtc
                                                                      1560
acacacaca acacacacat ttatactacg tactgttatc ggtattctac
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gtcatataat gggatagggt aaaaggaaac caaagagtga gtgatattat tgtggaggtg

1620

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1680
acagactacc cettetgggt acgtagggac agaceteett eggactgtet aaaacteece
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ttagaagtct cgtcaagttc ccggacgaag aggacagagg agacacagtc cgaaaagtta
                                                                      1800
tttttccggc aaatcctttc cctgtttcgt gacactccac cccttgtgga cacttgagtg
tcatccttgc gccggaaggt caggtggtac ccgtctgtag gggcggggag acagagccgc
                                                                      1860
gggggagcta cgagaatcga ctcacagggc gccccgggct tcgcaaatga aactttttta
                                                                      1920
atotoacaag titogtoogg gotoggogga cotatggogt ogatoottat tacottatoo
                                                                      1980
tggcgccaag ataaaacaac caaaagcctt gactccggta ctaattctcc ctgccggccc
                                                                      2040
ccgtaagcat aacgcggcga tctccacttt aagaacctgg ccgcgttctg cctggtctcg
                                                                      2100
ctttcgtaaa cggttcttac aaaagtaatt agttcttgct ttcagcctcc aagcttctgc
                                                                      2160
tagtetatgg cagcateaag getggtattt getacggetg accgetacge egeegeaata
                                                                      2220
agggtactgg gcggcccgtc gaaggccctt tggtttcaga aacccaaggc cccctcata
                                                                      2280
ccaacgtttc gactttgatt cttgccggta cgtggtggtg ggtgccttag ctctttctcg
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atagttagac
<210> 2
<211> 256
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<210> 2
<211> 256
<212> PRT
<213> Mus musculus
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<400> 2 Met Gly Asn Asn Cys Tyr Asn Val Val Ile Val Leu Leu Val 10 Gly Cys Glu Lys Val Gly Ala Val Gln Asn Ser Cys Asp Asn Cys Gln 25 Pro Gly Thr Phe Cys Arg Lys Tyr Asn Pro Val Cys Lys Ser Cys Pro 40 Pro Ser Thr Phe Ser Ser Ile Gly Gly Gln Pro Asn Cys Asn Ile Cys 55 Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser Thr 75 His Asn Ala Glu Cys Glu Cys Ile Glu Gly Phe His Cys Leu Gly Pro 90 Gln Cys Thr Arg Cys Glu Lys Asp Cys Arg Pro Gly Gln Glu Leu Thr 100 105 Lys Gln Gly Cys Lys Thr Cys Ser Leu Gly Thr Phe Asn Asp Gln Asn 120 Gly Thr Gly Val Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Arg 135 140 Ser Val Leu Lys Thr Gly Thr Thr Glu Lys Asp Val Val Cys Gly Pro 155 150 Pro Val Val Ser Phe Ser Pro Ser Thr Thr Ile Ser Val Thr Pro Glu 165 170 Gly Gly Pro Gly Gly His Ser Leu Gln Val Leu Thr Leu Phe Leu Ala 185 Leu Thr Ser Ala Leu Leu Leu Ala Leu Ile Phe Ile Thr Leu Leu Phe 200 205 Ser Val Leu Lys Trp Ile Arg Lys Lys Phe Pro His Ile Phe Lys Gln 215 Pro Phe Lys Lys Thr Thr Gly Ala Ala Gln Glu Asp Ala Cys Ser 235 230 Cys Arg Cys Pro Gln Glu Glu Gly Gly Gly Gly Tyr Glu Leu

245

250

<sup>&</sup>lt;210> 3 <211> 24 <212> PRT <213> Mus musculus

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<400> 3
Cys Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser
Thr His Asn Ala Glu Cys Glu Cys
            20
<210> 4
<211> 22
<212> PRT
<213> Drosophila
<400> 4
Cys Pro Val Cys Phe Asp Tyr Val Ile Leu Gln Cys Ser Ser Gly His
                                     10
Leu Val Cys Val Ser Cys
            20
<210> 5
<211> 26
<212> PRT
<213> Dictyostelium
<400> 5
Cys Pro Ile Cys Phe Glu Phe Ile Tyr Lys Lys Gln Ile Tyr Gln Cys
Lys Ser Gly His His Ala Cys Lys Glu Cys
            20
<210> 6
<211> 6
<212> PRT
<213> Mus musculus
<220>
<221> SITE
<222> (1)...(6)
<223> Xaa = Any Amino Acid
<400> 6
Val Gln Asn Ser Xaa Asp
<210> 7
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> An artificial peptide
Cys Arg Pro Gly Gln Glu Leu Thr Lys Ser Gly Tyr
<210> 8
<211> 24
<212> PRT
<213> Artificial Sequence
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<220>
<223> A conserved pattern
<221> SITE
<222> (1)...(24)
<223> Xaa = Any Amino Acid
<400> 8
Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
                                    10
Xaa His Xaa Xaa Cys Xaa Cys
             20
<210> 9
 <211> 4
<212> PRT
<213> Mus musculus
<400> 9
Cys Arg Cys Pro
<210> 10
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> A consensus sequence
<221> SITE
 <222> (1) ... (4)
<223> Xaa = Any Amino Acid
<400> 10
Cys Xaa Cys Pro
 1
<210> 11
<211> 25
<212> DNA
<213> Artificial Sequence
<220>
<223> A primer
<400> 11
acctcgaggt cctgtgcatg tgaca
                                                                         25
<210> 12
<211> 25
 <212> DNA
<213> Artificial Sequence
<220>
<223> A primer
<400> 12
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atgaattctt actgcaggag tgccc

25

<210> 13

<211> 11

<212> PRT

<213> Mus musculus

<400> 13

Cys Arg Pro Gly Gln Glu Leu Thr Lys Gln Gly

1 5 10